

ANALYZED  
AFTER DMR-67A-003

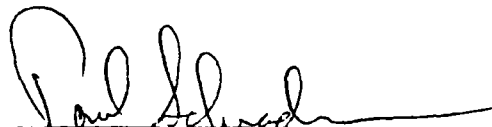
SUBJECT PET WASTE WATER STANDARDS  
DATE May 31, 1989  
TO Mr. Lionel Monette  
FROM Paul Schrader  
IN REPLY TO  
COPIES TO C152, E. Parker

A set of waste water standards were analyzed on 5/31/89. Listed below is a table of values obtained by our waste water laboratories vs. the certified range.

Parameter	Actual Value	Warning Limits	Lab Value E. Parker
Chlorides	93.0	86.7 - 100.9	85.6*
Sus. Solids	79.7	68.8 - 90.6	78.2
B.O.D.	15.2	7.2 - 21.3	13.4
C.O.D.	24.5	11.1 - 35.8	18.0
T.O.C.	9.2	6.9 - 11.9	9.8
Res. Cl <sub>2</sub>	0.32	0.14 - 0.52	0.30
Phenol	1.5		1.1
Ammonia Nitrogen	0.61	0.46 - 0.79	0.76

Corrective Action: Chloride analysis will be checked immediately after analysis and before sample is disposed of. Although analysis is out of warning limits, it is still within acceptance limits.

Phenol Standard was diluted from 50ppb supplied to 1.5ppb. 15.0mls of 50ppb were diluted to 500mls for analysis.

  
Paul Schrader

PS:1b

US EPA RECORDS CENTER REGION 5



402881



MICHIGAN WATER RESOURCES COMMISSION  
AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provision of the Federal Water Pollution Control Act, as amended, (33, U.S.C. 1251 et seq; the "Act"), and the Michigan Water Resources Commission Act, as amended, (Act 245, Public Acts of 1929, as amended, the "Michigan Act"),

Pennwalt Corporation

is authorized to discharge from a facility located at  
4655 Biddle Avenue  
Wyandotte, Michigan 48192

designated as Pennwalt Corp-West Plant  
to receiving water named the Detroit River (Trenton River Channel)

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I and II hereof.

This permit takes effect immediately upon the date of issuance. Any person who feels aggrieved by this permit may file a sworn petition with the Commission, setting forth the conditions of the permit which are being challenged and specifying the grounds for the challenge. The Commission may reject any petition filed more than 60 days after issuance as being untimely. Upon granting of a contested case to the applicant, the Commission shall review the permit to determine which contested terms shall be stayed until the Commission takes its final action. All other conditions of the permit remain in full effect. If the contested condition is a modification of a previous permit condition and the Commission determines the contested condition shall be stayed, then such previous condition remains in effect until the Commission takes final action. During the course of any administrative proceeding brought by a person other than the applicant, the conditions of this permit will remain in effect, unless the Commission determines otherwise.

This permit and the authorization to discharge shall expire at midnight October 1, 1987. In order to receive authorization to discharge beyond the date of expiration, the permittee shall submit such information and forms as are required by the Michigan Water Resources Commission no later than 180 days prior to the date of expiration.

This permit is based on an application dated August 15, 1984, as amended, and shall supersede any and all Orders of Determination, Stipulation, Final Orders of Determination, or NPDES Permits previously adopted by the Michigan Water Resources Commission.

Issued this \_\_\_\_\_ day of \_\_\_\_\_, by the Michigan Water Resources Commission superseding NPDES Permit No. MI 0002381, expiring May 30, 1980, and NPDES Permit No. MI 0028509, expiring October 31, 1979.

**DRAFT PERMIT**

Paul D. Zugger  
Executive Secretary

Reissue

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Final Effluent Limitations

Beginning on the date of issuance of the permit and lasting until the date of expiration of this permit, the permittee is authorized to discharge a maximum of eleven million six hundred thousand (11,600,000) gallons per day of process water, barometric condenser cooling water, noncontact cooling water and an unspecified amount of stormwater runoff from outfall 006 to Monguagon Creek to the Detroit River. Such discharge shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	kg/day (lbs/day)		Other Limitations		Measurement Frequency	Sample Type
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow, M <sup>3</sup> /Day (MGD)						
Total Suspended Solids	425 (934)	1625 (3580)	14.2 mg/l	37 mg/l	3x Weekly	24-Hr. Composite
BOD <sub>5</sub>	661 (1457)	967 (2133)			3x Weekly	24-Hr. Composite
Total Zinc			105 ug/l	190 ug/l	2x Monthly	24-Hr. Composite
Total Residual Chlorine				0.036 mg/l	3x Weekly	Grab
Phenol				0.200 mg/l	3x Weekly	24-Hr. Composite
Chlorides			Monitor		3x Weekly	24-Hr. Composite
Outfall Observation*					Daily	Visual Observation
Temperature			Monitor		3x Weekly	Reading

\*Any unusual characteristics of the discharge (i.e., unnatural turbidity, color, oil film, floating solids, foams, settleable solids, or deposits) shall be reported immediately to the District Office of the Surface Water Quality Division followed with a written report within 5 days detailing the findings of the investigation and the steps taken to correct the condition.

The term noncontact cooling water shall mean water used for cooling which does not come into direct contact with any raw material, intermediate product, by-product, waste product, or finished product.

a. The pH shall not be less than 6.0 nor greater than 9.0. The pH shall be monitored as follows: three times weekly; grab.

b. The receiving stream shall contain no unnatural turbidity, color, oil film, floating solids, foams, settleable solids, or deposits as a result of this discharge.

c. Samples, measurements and observations taken in compliance with the monitoring requirements above shall be taken at outfall 006 prior to discharge to Monguagon Creek.

d. In the event the permittee shall require the discharge of water treatment additives, the permittee shall notify the Chief of the Surface Water Quality Division. The permittee shall obtain written approval from the Chief of the Surface Water Quality Division to discharge such additives at a specified level. The permit may be modified in accordance with the requirements of Part II, Section B-4 if a constituent of the additive or additives requires limiting.

## Part I-A-1 (continued)

e. The above limitations for total suspended solids may be modified to a Net value upon demonstration to the Chief of the Surface Water Quality Division that gross values are unattainable by making the net demonstration according to 40 CFR Part 122. Such modification shall be made in accordance with Part II, Section 8-4.

2. Special Condition - Reopener Clause

This permit may be modified or, alternatively, revoked and reissued to comply with any applicable standard(s) or limitation(s) promulgated under Section 301(b)(2)(c)(d), 304(b)(2) and 307(a)(2) of the Act, if the effluent standard(s) or limitation(s) so promulgated:

- a. is(are) either different in condition or more stringent than any effluent limitation in the permit; or
- b. control(s) any pollutant not limited in the permit.

3. Special Condition - Notification Requirement

The discharger shall notify the Chief of the Surface Water Quality Division, in writing, within 10 days of knowing, or having reason to believe, that a change in facility operation, maintenance, or construction has resulted or will result in the discharge of:

- a. Detectable levels\* of chemicals on the current Michigan Critical Materials Register or priority pollutants or hazardous substances set forth in 40 CFR 122.21, Appendix D, which were not acknowledged in the application\*\* or listed in the application at less than detectable levels.
- b. Detectable levels\* of any other chemical not listed in the application or listed at less than detection, for which the application specifically requested information.
- c. Any chemical at levels greater than five times the average level reported in the application\*\*.

Any other monitoring results obtained as a requirement of this permit shall be reported in accordance with the schedule of compliance.

\*The detectable level shall be defined as the Method Detection Limit (MDL) as given in Appendix B to Part 136, Federal Register, Vol. 49, No. 209, October 26, 1984, pp. 43430-31.

\*\*The application dated August 15, 1984, as amended.

## 4. Special Condition - Short-Term waste Characterization Study

Upon issuance of this permit, the permittee shall monitor the discharge from outfall 006 for the constituents and at the frequency and duration specified below. This monitoring is designed to determine whether constituents are discharged in significant quantities. The results of analyses of such monitoring shall be submitted to the Detroit District Supervisor of the Surface Water Quality Division. If, upon review of the analysis, it is determined that any of the constituents require limits to protect the receiving waters in accordance with applicable water quality standards, or categorical limit requirements (40 CFR, Parts 242 and 416), the permit may be modified after public notice and Commission approval of the recommended permit modification in accordance with Part II, B-4.

A. The following organic constituent shall be sampled monthly for two months using approved sampling methods and analytical procedures.

diethyl thiourea

Results of sampling and analysis shall be submitted to the Detroit District Supervisor of the Surface Water Quality Division.

B. The following inorganic constituents shall be sampled once a month for two (2) months using approved sampling methods and analytical procedures:

Hexavalent Chromium      Dissolved Oxygen  
T. Phosphorus

Sampling and analysis results shall be submitted to the Detroit District Supervisor of the Surface Water Quality Division.

## 5. Special Condition - Intake Monitoring

Beginning on the date of issuance of this permit and lasting until the date of expiration of this permit, the permittee shall monitor the intake as specified below:

Characteristics	Monitoring Requirements	
	Measurement Frequency	Sample Type
BOD <sub>5</sub>	3x weekly	24-Hr. Composite
Total Suspended Chlorides	3x weekly	24-Hr. Composite
Chlorides	3x weekly	24-Hr. Composite

a. Samples taken in compliance with the monitoring requirements above shall be taken of the intake after initial screening or pre-process treatment.

b. Results of monitoring and analysis shall be submitted to the Detroit District Supervisor of the Surface Water Quality Division.

## PART I

## B. MONITORING AND REPORTING

## 1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Reporting: ☒ A = applicable to your facility; ☒ NA = not applicable to your facility

☒ a. MOR Submittal Requirements - The permittee shall submit Monthly Operating Report (MOR) forms to the Surface Water Quality Division, Data Entry, of the Michigan Department of Natural Resources for each calendar month of the authorized discharge period(s). The MOR's shall be postmarked no later than the 10th day of the month following each month of the authorized discharge period(s).

☒ b. Retained Self-Monitoring Requirements - The permittee shall maintain a year-to-date log of retained self-monitoring results and provide such log for inspection to the staff of the

- ☐ (1.) Surface Water Quality Division of the Michigan Department of Natural Resources.
- ☐ (2.) Environmental Health Services Division, Michigan Department of Public Health
- ☐ (3.) Northern Peninsula Division, Michigan Department of Public Health
- ☐ (4.) Division of Health Facility Licensing & Certification, Michigan Department of Public Health

upon request.

The permittee shall certify, in writing, to the Chief of the Surface Water Quality Division of the Department of Natural Resources in accordance with the Schedule of Compliance Part I, C- NA, that:

- (1.) all retained self-monitoring requirements have been complied with and a year-to-date log has been maintained.
- (2.) the flow rate(s) (if part of retained self-monitoring results) from all outfalls have been substantially the same as the flow rate(s) authorized by this permit or if
- (3.) the flow rate(s) (if part of retained self-monitoring results) is (are) substantially different from the flow rate(s) authorized by this permit and the permittee shall provide reasons for the difference in flow rates.

☒ c. Groundwater Monitoring - The permittee shall submit Monthly Operating Report (MOR) forms to the Surface Water Quality Division, Data Entry, of the Michigan Department of Natural Resources in accordance with the monitoring requirements set forth in Part I, A- NA. The MOR's shall be postmarked no later than the 10th day of the month following each completed report period.

☒ d. First Permit - Existing or Proposed Facility - Upon issuance of the first permit for an existing or proposed facility the permittee is exempt from submitting MOR's for a period of ninety (90) days from the date the permit is issued.

☒ e. Permit Reissuance or Modification - For any parameter added to the monitoring requirements as a result of permit reissuance or modification of the current permit, the permittee will be exempt from submitting MOR data for that parameter for a period of ninety (90) days from the date the permit is issued.

## 3. Definitions

a. The monthly average discharge is defined as the total discharge by weight, or concentration if specified, during the reporting month divided by the number of days in the reporting month that the discharge from the production or commercial facility occurred. When less than daily sampling occurs, the monthly average discharge shall be determined by the summation of the measured daily discharges by weight, or concentration if specified, divided by the number of days during the reporting month when the samples were collected, analyzed and reported.

b. The daily maximum discharge means the total discharge by weight, or concentration if specified, during any calendar day.

c. The Regional Administrator is defined as the Region V Administrator, U.S. EPA, located at 230 South Dearborn, 13th Floor, Chicago, Illinois 60604.

d. The Michigan Water Resources Commission is located in the STEVENS T. MASON BUILDING. The mailing address is Box 30028, Lansing, Michigan 48909.

## 4. Test Procedures

Test procedures for the analysis of pollutants shall conform to regulations published pursuant to Section 304(h) of the Act, under which such procedures may be required.

## 5. Recording Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The exact place, date, and time of sampling;
- b. The dates the analyses were performed;
- c. The person(s) who performed the analyses;
- d. The analytical techniques or methods used; and
- e. The results of all required analyses.

## 6. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Monthly Operating Report. Such increased frequency shall also be indicated.

## 7. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation shall be retained for a minimum of three (3) years, or longer if requested by the Regional Administrator or the Michigan Water Resources Commission.

## C. SCHEDULE OF COMPLIANCE

1. The permittee shall operate the installed facilities to achieve the effluent limitations specified for outfall 006.

2. The permittee shall comply with the requirements of Section 10, Part II-A in accordance with the following:

- a. Submit plans or a letter of intent, for approval to the Detroit District Supervisor of the Surface Water Quality Division necessary to comply with the primary power provision of Section 10 in Part II on or before sixty (60) calendar days after permit issuance.
- b. The permittee shall comply with the requirements of items 10a or 10b contained in Part II upon permit issuance. Notwithstanding the preceding sentence, the permittee shall at all times halt, reduce, or otherwise control production in order to protect the waters of the State of Michigan upon reduction or loss of the primary source or power.

3. The permittee shall achieve compliance with the "Short-Term Waste Characterization Studies" and "Intake Monitoring special conditions of Part I-A-4 and A-5, in accordance with the following compliance schedule. All submittals shall be to the Detroit District Supervisor of the Surface Water Quality Division.

- a. On or before December 1, 1986, the permittee shall submit and receive approval of a monitoring, sampling and analyses plan.
- b. On or before 150 days from receipt of approval of plans submitted in Part I, C-3a, the permittee shall have completed all monitoring as required.
- c. On or before 180 days from receipt of approval of plans submitted in Part I, C-3a, the permittee shall submit the results of the analysis of such monitoring.

5. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress, or, in the case of specific actions being required by identified dates, a written statement of compliance or noncompliance. In the latter case, the statement shall include the cause of noncompliance, any remedial actions taken and the probability of meeting the next scheduled requirement. Failure to submit the written statement is just cause to pursue enforcement action pursuant to the Commission Act and the Part 21 Rules.

## PART II

## A. MANAGEMENT REQUIREMENTS

## 1. Duty to Comply

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit.

It is the duty of the permittee to comply with all the terms and conditions of this permit. Any noncompliance with the Effluent Limitations, Special Conditions, or terms of this permit constitutes a violation of Public Acts 245 of 1929, as amended, and/or PL 92-500, as amended, and constitutes grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of an application for permit renewal.

## 2. Change of Conditions

Any anticipated facility expansion, production increases, or process modification which will result in new, different, or increased discharges of pollutants must be reported by submission of a new application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the permit issuing authority of such changes. Following such notice, the permit may be modified to specify and limit any pollutant not previously limited.

## 3. Containment Facilities

The permittee shall provide facilities for containment of any accidental losses of concentrated solutions, acids, alkalies, salts, oils, or other polluting materials in accordance with the requirements of the Michigan Water Resources Commission Rules, Part 5. This requirement is included pursuant to Section 5 of the Michigan Water Resources Commission Act, 1929 PA 245, as amended, and the Part 5 rules of the General Rules of the Commission.

## 4. Operator Certification

The permittee shall have the waste treatment facilities under direct supervision of an operator certified by the Michigan Water Resources Commission, as required by Section 6a of the Michigan Act.

## 5. Noncompliance Notification

If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum effluent limitation specified in this permit, the permittee shall provide the Chief of the Surface Water Quality Division with the following information, in writing, within five (5) days of becoming aware of such condition:

- a. A description of the discharge and cause of noncompliance; and
- b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and the steps taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

## 6. Spill Notification

The permittee shall immediately report any spill or loss of any product, by-product, intermediate product, oils, solvents, waste material, or any other polluting substance which occurs to the surface waters or groundwaters of the state by calling the Department of Natural Resources 24-hour Emergency Response telephone number 1-800-292-4706; and the permittee shall within ten (10) days of the spill or loss, provide the state with a full written explanation as to the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken, and schedule of implementation. This requirement is included pursuant to Section 5 of the Michigan Water Resources Commission Act, 1929 PA 245, as amended.

## 7. Facility Operation

The permittee shall at all times properly operate and maintain all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

## 8. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the surface or groundwaters of the state resulting from noncompliance with any effluent limitation specified in this permit including, but not limited to, such accelerated or additional monitoring as necessary to determine the nature and impact of the discharge in noncompliance.

## 9. By-Passing

Any diversion from or by-pass of facilities necessary to maintain compliance with the terms and conditions of this permit is prohibited, except (i) where unavoidable to prevent loss of life, personal injury, or severe property damage, or (ii) where excessive storm drainage or runoff would damage any facilities necessary for compliance with the effluent limitations and prohibitions of this permit. The permittee shall promptly notify the Michigan Water Resources Commission and the Regional Administrator, in writing, of such diversion or by-pass.

## 10. Power Failures

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

- a. Provide an alternative power source sufficient to operate facilities utilized by permittee to maintain compliance with the effluent limitations and conditions of this permit which provision shall be indicated in this permit by inclusion of a specific compliance date in each appropriate "Schedule of Compliance for Effluent Limitations".

- b. Upon the reduction, loss, or failure of one or more of the primary sources of power to facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit, the permittee shall halt, reduce or otherwise control production and/or all discharge in order to maintain compliance with the effluent limitations and conditions of this permit.

#### 11. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed from or resulting from treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters, or the entry of toxic or harmful contaminants thereof onto the groundwaters in concentrations or amounts detrimental to the groundwater resource.

#### 12. Upset Noncompliance Notification

If a process "upset" (defined as an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee) has occurred, the permittee who wishes to establish the affirmative defense of upset shall notify the Chief of the Surface Water Quality Division by telephone within 24 hours of becoming aware of such conditions and within five (5) days, provide in writing, the following information:

- a. That an upset occurred and that the permittee can identify the specific cause(s) of the upset;
- b. That the permitted wastewater treatment facility was, at the time, being properly operated;
- c. That the permittee has specified and taken action on all responsible steps to minimize or correct any adverse impact in the environment resulting from noncompliance with his permit.

In any enforcement proceedings, the permittee is seeking to establish the occurrence of an upset, has the burden of proof.

13. Any requirement of this permit which is included under the unique terms of Michigan, the Water Resources Commission, Act 243, P.A. 1929, as amended, and rules promulgated thereunder, is not enforceable under the Federal Clean Water Act regulations.

#### B. RESPONSIBILITIES

##### 1. Right of Entry

The permittee shall allow the Executive Secretary of the Michigan Water Resources Commission, the Regional Administrator and/or their authorized representatives, upon the presentation of credentials:

- a. To enter upon the permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit; and
- b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any discharge of pollutants.

##### 2. Transfer of Ownership or Control

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Michigan Water Resources Commission and the Regional Administrator.

##### 3. Availability of Reports

Except for data determined to be confidential under Section 308 of the Act and Rule 2128 of the Water Resources Commission Rules, Part 21, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the State Water Pollution Control Agency and the Regional Administrator. As required by the Act, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Act and Sections 7 and 10 of the Michigan Act.

##### 4. Permit Modification

After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

- a. Violation of any terms or conditions of this permit;
- b. Obtaining this permit by misrepresentation or failure to disclose fully, all relevant facts; or
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

## 5. Toxic Pollutants

Notwithstanding Part II, B-4 above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition and the permittee so notified.

## 6. Civil and Criminal Liability

Except as provided in permit conditions on "By-Passing" (Part II, A-9) and "Power Failures" (Part II, A-10), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance, whether or not such noncompliance is due to factors beyond his control, such as accidents, equipment breakdowns, or labor disputes.

## 7. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee may be subject under Section 311 of the Act except as are exempted by federal regulations.

## 8. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Act.

## 9. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize violation of any Federal, State or local laws or regulations, nor does it obviate the necessity of obtaining such permits or approvals from other units of government as may be required by law.

## 10. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, if held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

## 11. Notice to Public Utilities (Miss Dig)

The issuance of this permit does not exempt the permittee from giving notice to public utilities and complying with each of the requirements of Act 53 of the Public Acts of 1974, being sections 460.701 to 460.718 of the Michigan Compiled Laws, when constructing facilities to meet the terms of this permit.

## MIXING ZONE

Facility: Pennwalt Corporation  
4655 Biddle Avenue  
Wyandotte, MI 4812

<u>Outfall Number</u>	<u>Receiving Water</u>	<u>Discharge Location</u>
006	Detroit River (Trenton Channel) via Monguagon Creek	NW $\frac{1}{4}$ , Section 5, T4S, R11E, Wayne County

The mixing zone for the purposes of evaluating compliance with the States water quality standards is defined as the area enclosed within the right 100 feet of the Detroit River from outfall 001, extending 500 feet downstream from the south Pennwalt property line and all of Monguagon Creek, from the point of discharge to the confluence of the Detroit River, hence the right 100 feet of the Detroit River, for a distance of 300 feet downstream.

For toxic pollutants, the volume of receiving water used in assuring that effluent limitations are sufficiently stringent to meet Water Quality Standards is 25% of the design flow of the receiving stream.

For other pollutants, the volume of receiving water used in assuring that effluent limitations are sufficiently stringent to meet Water Quality Standards is the design flow of the receiving stream.